

THAT WHICH IS CLAIMED:

1. A method of treating non-Hodgkin's B-cell lymphoma in a mammal, said method comprising concurrent therapy with an anti-CD20 antibody or fragment thereof
5 and interleukin-2 (IL-2) or variant thereof, wherein said concurrent therapy promotes a positive therapeutic response in a treated mammal.

2. The method of claim 1, wherein said mammal is a human.

10 3. The method of claim 1, wherein said positive therapeutic response is greater than a therapeutic response that would be observed with therapy using said anti-CD20 antibody or fragment thereof alone or with therapy using said IL-2 or variant thereof alone.

15 4. The method of claim 1, wherein said concurrent therapy comprises administering to said mammal at least one therapeutically effective dose of a pharmaceutical composition comprising said anti-CD20 antibody or fragment thereof and at least one therapeutically effective dose of a pharmaceutical composition comprising said IL-2 or variant thereof.

20 5. The method of claim 4, wherein said IL-2 or variant thereof is administered subcutaneously.

25 6. The method of claim 4, wherein said anti-CD20 antibody is an immunologically active chimeric anti-CD20 antibody.

7. The method of claim 6, wherein said chimeric anti-CD20 antibody is IDEC-C2B8.

30 8. The method of claim 4, wherein said pharmaceutical composition is selected from the group consisting of a stabilized monomeric IL-2 pharmaceutical

composition, a multimeric IL-2 composition, a stabilized lyophilized IL-2 pharmaceutical composition, and a stabilized spray-dried IL-2 pharmaceutical composition.

9. The method of claim 8, wherein said IL-2 is recombinantly produced IL-2
5 having an amino acid sequence for human IL-2 or variant thereof.

10. The method of claim 9, wherein said variant thereof has an amino acid
sequence having at least about 70% sequence identity to the amino acid sequence for said
human IL-2.
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11. The method of claim 8, wherein said anti-CD20 antibody is an
immunologically active chimeric anti-CD20 antibody.

12. The method of claim 11, wherein said chimeric anti-CD20 antibody is
15 IDEC-C2B8 or fragment thereof.

13. The method of claim 4, wherein said therapeutically effective dose of said
anti-CD20 antibody or fragment thereof is in the range from about 125 mg/m² to about
500 mg/m² and wherein said therapeutically effective dose of IL-2 or variant thereof is in
20 the range from about 2 mIU/m² to about 12 mIU/m².

14. The method of claim 13, wherein said therapeutically effective dose of
said anti-CD20 antibody is in the range from about 225 mg/m² to about 400 mg/m² and
wherein said therapeutically effective dose of IL-2 or variant thereof is in the range from
25 about 3 mIU/m² to about 6 mIU/m².

15. The method of claim 14, wherein said therapeutically effective dose of
said anti-CD20 antibody is about 375 mg/m² and wherein said therapeutically effective
dose of IL-2 or variant thereof is about 4.5 mIU/m².
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16. The method of claim 4, wherein said concurrent therapy comprises a first administration of said anti-CD20 antibody or fragment thereof on day 1 of a treatment period followed by a first administration of said IL-2 or variant thereof within 7 days of said first administration of said anti-CD20 antibody or fragment thereof to said subject.

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17. The method of claim 4, wherein said concurrent therapy comprises multiple dosing of said anti-CD20 antibody or fragment thereof and said IL-2 or variant thereof.

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18. The method of claim 17, wherein said multiple dosing comprises administering said anti-CD20 antibody or fragment thereof once per week for a period of 4 weeks starting on day 1 of a treatment period, and administering a daily dose of said IL-2 or variant thereof for a period of 4 weeks starting on day 8 of said treatment period.

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19. The method of claim 17, wherein said multiple dosing comprises administering said anti-CD20 antibody or fragment thereof once per week for a period of 4 weeks starting on day 1 of a treatment period, and administering said IL-2 or variant thereof on days 8, 10, 12, 15, 17, 19, 22, 24, 26, and 29 of said treatment period.